



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/955,236

09/17/2001

Shinji Kobayashi

450100-03491

8335

20999

7590

03/28/2005

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER

HOLLOWAY III, EDWIN C

ART UNIT

PAPER NUMBER

2635

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,236

Applicant(s)

KOBAYASHI, SHINJI

Examiner

Edwin C. Holloway, III

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

EXAMINER'S RESPONSE

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection on 1-21-05. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12-27-04 has been entered. All the amendments to the specification and claims have been entered. The examiner has considered the new presentation of claims and applicant's arguments in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

Drawings

2. The drawings are objected to because fig. 2 shows two different elements with reference numeral 35. As best understood from the specification, the wireless device box should be labeled as element 33. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet,

Art Unit: 2635

even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 and 3-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description

Art Unit: 2635

requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claim 1, the limitation of "the portable information device comprising a bridge for changing the protocol of said high-speed network and the protocol of said low-speed network" is new matter because the portable information device 40 in the specification as originally filed does not include a bridge. The original specification includes a bridge 9, in paragraphs 29, 31 and 31-36, connecting networks 11 and 21, but no bridge is included in the portable information device 40 discussed in paragraph 32. Regarding claim 3, the limitation of said access device comprising a network interface "integrated with a bridging element, said bridging element configured to provide conversion of formats of messages and character codes, and to exchange address structures" is new matter because fig. 2 and paragraphs 34 lack any bridge "integrated" with network interface 32 of access point 40. CPU 35 may convert protocols, but it is not integrated to the network interface 32. Further, the particularly claimed bridging limitation is disclosed in paragraph 29 as directed to bridge 9 that is not part of the access device 40, nor is bridge

Art Unit: 2635

9 integrated with any other structure. Regarding claim 7, the limitation of access point for reciprocal data communication between said low speed network and said high speed network providing conversion of transmission rates and protocols to enable said reciprocal communication between low-speed and high-speed networks is new matter because the access point 40 in paragraph 34 converts rates/protocols between the portable information device and the low speed network, not between the low and high speed networks. The bridge 9 in paragraph 29 converts protocols/rates between the low and high speed networks and is not part of the access point. Regarding claim 9, "plurality of low-speed network" is new matter because networks 21 and 7 in fig. 6 are described as high speed, but only one low-speed network 11 is described. Regarding claim 10, "plurality of low-speed network" is new matter because networks 21 and 7 in fig. 6 are described as high speed, but only one low-speed network 11 is described.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borgstahl (US 5909183) in combination with

Art Unit: 2635

Eisenhandler (US 5452291) and Shteyn (6199136).

Borgstahl discloses a portable information device (remote control) 300 comprising: initialization data transmitting means 300 for transmitting initialization data 326 to an access point; response data receiving means 300 for receiving response data 328 responsive to said initialization data from said access point; and operational information transmitting means 300 for transmitting information 334/340 used to operate a home appliance after said response data receiving means receive said response data. See figs. 20-21 and col. 16 line 15 - col. 17 line 17. Borgstahl does not expressly recite the access point connected to a home network connected to home appliances, but does include peers connection to remote peer devices or appliance over a LAN via gateway interface 44 in fig. 1-2 and col. 5 lines 30-58.

Eisenhandler discloses an analogous art appliance control system where a portable remote control 90 controls appliances (50-56) connected to a home automation appliance LAN 80 using router 10 as an access point. This allows remote control of appliances in various locations of the home. See figs. 1-3 and col. 1 line 1 - col. 3 line 52 and col. 4 line 30 - col. 5 line 66.

It would have been obvious to one of ordinary skill in the

Art Unit: 2635

art at the time the invention was made to have included in Borgstahl connection of the access point to the appliance over a home network as disclosed in Eisenhandler to allow remote control of appliances in various locations of the home as suggested by Borgstahl disclosing connection of peers over a wired LAN using a gateway similar to the brouter of Eisenhandler.

Borgstahl discloses selecting an appliance address but does not expressly describe transmitting the address. Eisenhandler discloses a portable wireless device transmitting an address in col. 12 lines 9-28 in order to properly route the packet to a destination device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the operational information transmitting means transmit identity information used to identify the home appliance in view of Eisenhandler disclosing a portable device transmitting an address to properly route the packet to a destination device as suggested by Borgstahl disclosing selection of an address of a device to be controlled.

Borgstahl includes a network interface 44 for accessing a LAN connected to devices or appliances to communicate with each of the appliances; a portable information device interface 38

Art Unit: 2635

for communicating with said portable information device; and control means 40/42 for doing a negotiation with said portable information device via said portable information device interface, whereby data are transmitted between said portable information device and each of said appliances through said portable information device interface and said network interface after the negotiation by the control means. Negotiation is disclosed in col. 9 lines 5-67, including relaying communication over a router or gateway to a remote device 34. A home network is not expressly recited in Borgstahl, but would have been obvious for the same reasons applied above in view of the interfaces 14 and 16 of Eisenhandler.

Said control means determine whether the data received from said portable information device interface are valid and further determine, when the data are valid, whether the data are an initialization packet, followed by creation of a new initialization packet when the data are an initialization packet, and outputting of the new initialization packet to said portable information device interface would have been obvious in view of the validation in col. 15 lines 16-25 of Eisenhandler in order to discard invalid packets and the initialization address search in col. 16 line '33 - col. 17 line 17 of Borgstahl.

Said control means analyzes data received from said

Art Unit: 2635

portable information device and delivers the data to said network interface after a protocol conversion would have been obvious in view of the conversion in col. 7 line 58-col. 8 line 27 of Eisenhandler and suggested by the translation in col. 10 lines 25-40 of Borgstahl.

Said control means determine whether data received from said network interface are valid for accessing said portable information device, creating a transfer packet and outputting the transfer packet to said portable information device interface when the data are valid would have been obvious for the same reasons applied above.

A home network system comprising; a home network for networking a plurality of home appliances; a portable information device connectable to said home network in a wireless manner; and an access point for reciprocal data communication between said home appliances connected to said home network and said portable information device, wherein said portable information device does negotiation to be served by said access point would have been obvious for the same reasons applied above. Note that both Borgstahl and Eisenhandler include reciprocal data communication.

Said portable information device transmits to said access point the data used to select a home appliance from among a

Art Unit: 2635

plurality of said home appliances after said negotiation would have been obvious for the reasons applied above.

Regarding claim 9, a method for accessing a home network networking a plurality of home appliances, comprising: receiving from a portable wireless information device a request for accessing said home network; recognizing, upon receipt of the request for access, an address for designating a home appliance with which said portable wireless information device will communicate; and enabling exchange of data between the home appliance designated by recognized said address and said portable wireless information device would have been obvious in view of the requests such as address search request 326, address acknowledge 328 and the exchange of data 334-342 in fig. 21 of Borgstahl in combination with the home network interface and portable device transmitting a destination address in Eisenhandler for the reasons applied above to claims 1-2.

Regarding claim 10, a method for accessing a home network networking a plurality of home appliances, comprising: transmitting a request for accessing said home network to an access point connected to said home network; transmitting address information used to designate a home appliance included in said home network after transmitting the request for access; and transmitting operational information used to operate said

Art Unit: 2635

home appliance after transmitting said address information would have been obvious in view of the requests such as address search request 326, address acknowledge 328 and the transmitting of commands 334-342 in fig. 21 of Borgstahl in combination with the home network interface and portable device transmitting a destination address in Eisenhandler for the reasons applied above to claims 1-2.

Regarding the language added to the claims by the 7-6-04 amendment, the examiner concedes that Borgstahl and Eisenhandler do not explicitly refer to high speed devices and low speed home appliances, but appliances are shown in fig. 3 of Borgstahl and fig. 3 of Eisenhandler that at least suggest the low speed home appliances. Further, fig. 3 of Borgstahl includes a computer that at least suggest a high speed device. Further, Borgstahl includes a gateway 44 and Eisenhandler includes brouter cluster controllers (BCC's) with bridging that at least suggest a bridge. Shteyn discloses a method and apparatus to provide interoperability between high data rate and low data rate networks. Shteyn includes a high data rate network with high data rate or high speed devices such as DTV and DVCR in col. 7 lines 60-62. Shteyn includes a slow data rate network with low data rate or low speed devices/appliances 124,126,128 in col. 7 line 63 - col. 8 line 3, col. 8 lines 17-20 and col. 8 lines 45-

Art Unit: 2635

51. A bridge between the high speed network 102 and low speed network 104 is included in col. 8 lines 43-45. Although the element 30 is identified, it is clear from fig. 1 that element 130 was intended. Shteyn also includes discovery by allowing devices to advertise their capabilities in col. 3 lines 50-66. Col. 5 lines 29-33 Shteyn discloses that the object is to merge a low bit rate home network with a high bit rate home network and to enable a HAVi system and low bit rate PC based home automation system to co-exist and enhance each other's functionalities. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above means and method to communicate to low speed appliances and high speed appliances through a bridging element as disclosed in Shteyn because Shteyn discloses that this allows one to merge a low bit rate home network with a high bit rate home network and to enable a HAVi system and low bit rate PC based home automation system to co-exist and enhance each other's functionalities and because Borgstahl and Eisenhandler suggest low/high speed appliances/devices and bridges/gateways.

Regarding limitations added by the 12-27-04 amendment, plural low speed networks in claims 9-10 would have been obvious in view of Shteyn disclosing multiple low speed networks in the

Art Unit: 2635

form of X-10 network, CEBus network and IR network connected to bridge BAV 130. Further the exchanges of addresses and conversion of message formats, character codes, transmission rates and protocols would have been obvious in view of the translation and passing on of messages from network 102 to 104 in col. 8 lines 40-51 of Shteyn, where the networks 102 and 104 have different protocols and rates in col. 7 line 23 - col. 8 line 23. The combination is suggested by Shteyn disclosing advantages such as "cost-efficient control" and "synergistic aspects of the combination" in col. 8 lines 43-46.

Response to Arguments

7. Applicant's arguments with respect to claims 1 and 3-10 filed 12-27-04 have been considered but are moot in view of the new ground(s) of rejection. The arguments regarding the 35 USC 103 rejection of claims 9-10 are not persuasive for the reasons stated the above rejection.

CONTACT INFORMATION

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact an Electronic Business Center (EBC) representatives at 703-305-3028 or toll free at 866-217-9197 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at ebc@uspto.gov. The

Art Unit: 2635

Patent EBC is a complete customer service center that supports all Patent e-business products and service applications. Additional information is available on the Patent EBC Web site at <http://www.uspto.gov/ebc/index.html>.

Any inquiry of a general nature should be directed to the Technology Center 2600 receptionist at (571) 272-2600.

Facsimile submissions may be sent via fax number (703) 872-9306 to customer service for entry by technical support staff. Questions regarding fax submissions should be directed to customer service voice line (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (571) 272-3058. The examiner can normally be reached on M-F (8:30-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068.



EDWIN C. HOLLOWAY, III
PRIMARY EXAMINER
ART UNIT 2635

EH
3/17/05